

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington DC 20554

In the Matter of)	
)	
Allocation and Designation of Spectrum for)	
Fixed-Satellite Services in the 37.5-38.5 GHz,)	
40.5-41.5 GHz and 48.2-50.2 GHz Frequency)	
Bands; Allocation of Spectrum to Upgrade)	IB Docket No. 97-95
Fixed and Mobile Allocations in the 40.5-)	
42.5 GHz Frequency Band; Allocation of)	RM-8811
Spectrum in the 46.9-47.0 Frequency Band for)	
Wireless Services; and Allocation of Spectrum)	
in the 37.0-38.0 GHz and 40.0-40.5 GHz for)	
Government Operations)	

**REPLY COMMENTS OF THE
WIRELESS COMMUNICATIONS ASSOCIATION INTERNATIONAL, INC.**

THE WIRELESS COMMUNICATIONS
ASSOCIATION INTERNATIONAL, INC.

Paul J. Sinderbrand
Robert D. Primosch

WILKINSON BARKER KNAUER, LLP
2300 N Street, NW
Suite 700
Washington, DC 20037-1128
202.783.4141

Its Attorneys

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The Wireless Communications Association International, Inc. ("WCA"), by its attorneys, hereby submits its comments with respect to the *Further Notice of Proposed Rulemaking* ("FNPRM") issued in the above-captioned proceeding.

I. EXECUTIVE SUMMARY.

Both the fixed wireless industry and the National Telecommunications and Information Administration ("NTIA") have, with certain limited caveats, voiced strong support for the Commission's proposal to create a plan for the 36.0-51.4 GHz band and otherwise modify its rules to promote optimal usage of that spectrum by fixed wireless and satellite providers.¹ As reflected throughout the *FNPRM*, the Commission's proposal represents a carefully crafted compromise based on years of exhaustive debate and

¹ See Comments of The Wireless Communications Association International, Inc., IB Docket No. 97-95, at 1-2 (filed Sept. 4, 2001) [the "WCA Comments"]; Comments of Winstar Communications, Inc., IB Docket No. 97-95 at 2-3 (filed Sept. 4, 2001) [the "Winstar Comments"]; Letter from William T. Hatch, Associate Administrator, Office of Spectrum Management, National Telecommunications and Information Administration, to Bruce Franca, Acting Chief, Office of Engineering and Technology, Federal Communications Commission, IB Docket No. 97-95, at 1 (filed Sept. 20, 2001).

negotiation between the Commission, international regulators and private industry.² Clearly, neither fixed wireless nor satellite providers will come away from this proceeding with everything they want – that is the nature of the rulemaking process. Nonetheless, the *FNPRM* attempts (successfully, in large part) to establish a workable middle ground that will minimize sharing burdens and facilitate more rapid deployment of fixed wireless and satellite services, to the ultimate benefit of consumers. At least in this regard, WCA agrees with the comments submitted by Satellite Industry Association (“SIA”):

In adopting additional rules pursuant to the *FNPRM*, the Commission’s goal should be to implement fairly the compromises made at WRC-2000, thereby promoting the development of both FSS and fixed [wireless] service operations in the affected bands. The FCC and other U.S. Government agencies worked long and hard to craft the compromises achieved at WRC-2000 concerning 40/50 GHz band (“V-band”) spectrum use. The Commission should therefore adopt proposals that facilitate the soft-segmentation model that was agreed to, and reject those proposals that would serve to upset the balance of spectrum use that is embodied in this compromise and thereby potentially re-open a potentially difficult domestic debate.³

Regrettably, however, certain members of the satellite industry are pressing ahead with their efforts to create a sharing scheme for the 37.0-40.0 GHz band that would write fixed wireless service in that spectrum out of existence and upend the delicate regulatory balance the Commission is trying to achieve in the *FNPRM*. Simply put, this proceeding is not a referendum on whether the future of fixed wireless service should be surrendered to the satellite interests – WRC-2000 has already resolved that issue in the negative. Rather, as noted by SIA, the Commission’s objective here is to establish a compromise

² See, e.g., *FNPRM* at ¶¶ 2-11.

³ Comments of the Satellite Industry Association, IB Docket No. 97-95, at 2 (filed Sept. 4, 2001) [the “SIA Comments”].

that accurately reflects the spirit of what was agreed to at WRC-2000. Equally important, the Commission's revised band plan and technical rules must protect the legitimate investment-backed expectations of "millimeter wave" fixed wireless providers who, unlike virtually all of the satellite interests who seek to displace them, have already bought and paid for their spectrum at auction.

Accordingly, consistent with the overriding principles discussed above, WCA urges the Commission to do the following:

- adopt its proposal to designate the 37.0-40.0 and 42.0-42.5 GHz bands for terrestrial wireless services, and reject any satellite industry request to limit terrestrial wireless operations to the 38.6-40.0 GHz band;
- adopt its proposal to establish satellite power flux density ("PFD") limits that reflect the more conservative U.S./CITEL approach proposed at WRC-2000;
- adopt its proposal to limit satellite operations in the 37.5-40.0 GHz band to "gateway" facilities, and reject any proposed rule modifications that would directly or indirectly authorize ubiquitous earth station deployment in that spectrum;
- permit satellite operators in the 37.5-40.0 GHz band to exceed the Commission's PFD limits only for that amount of time agreed to by all affected fixed wireless and satellite providers via private negotiation, and in no event more than .001% of the time per year; and
- ensure that its Part 101 rules preserve the priority of fixed wireless service in the 37.0-40.0 GHz band and protect the legitimate investment-backed expectations of fixed wireless providers who acquired their spectrum at auction.

II. DISCUSSION.

A. *The Commission's Proposed Band Plan and Technical Rules for the V-Band Should Embody the Spirit and Intent of the Compromise Position Agreed to at WRC-2000.*

To understand why the self-serving technical proposals of the satellite industry should be rejected, it is important to return to the events leading up to the *FNPRM*:

[A]fter [the Commission] adopted the *36-51 GHz Reconsideration Order*, the U.S. delegation to WRC-2000 reached consensus on a proposal for a global sharing arrangement for portions of the 36.0-51.4 GHz band. After years of debate over numerous band plans and sharing models, competing satellite and wireless proponents recognized the onerous burdens that a sharing regime might impose on both satellite and wireless services; agreed that wireless, and, especially, satellite systems operate most efficiently in a globally consistent allocation of contiguous spectrum; and acknowledged that wireless operations around the globe already occupied many portions of frequency spectrum below 40.0 GHz while relatively few wireless services occupied spectrum above 40 GHz. These fundamental principles allowed satellite and wireless proponents in the United States to agree to a global band plan for satellite and terrestrial services in the 37.5-42.5 GHz band during the domestic preparation for WRC-2000. Seizing on this domestic consensus, the United States forwarded the global band plan as a U.S. submission to the Inter-American Telecommunication Commission (CITEL). The United States then worked to achieve the regional consensus necessary to incorporate the U.S. proposals for this band in CITEL's submissions to WRC-2000.⁴

Significantly, the U.S. position at CITEL explicitly acknowledged that fixed wireless systems "required stringent satellite PFDs," but that those limits could permit restricted operation of fixed satellite service ("FSS") gateways below 40.0 GHz.⁵ Although the United States ultimately agreed to PFD limits that were slightly less stringent than those it had originally proposed, it did so as a compromise to achieve a

⁴ *FNPRM* at ¶ 8.

⁵ *Id.* at ¶ 9.

regionally supported WRC proposal.⁶ The final CITELE submissions to WRC-2000 ultimately proposed a “soft segmentation” of the 37.5-42.5 GHz band that adopted restrictive satellite PFD limits below 40 GHz, so as to “encourage relatively unconstrained technological innovation and growth” of fixed wireless services over that spectrum.⁷ The sharing arrangement ultimately adopted at WRC-2000 designated the 37.0-40.0 GHz and 40.5-43.5 GHz bands for fixed wireless service, and otherwise was largely based on soft-segmentation approach offered by CITELE and the U.S.⁸

Notwithstanding the above, and without regard to the Commission’s desire to create a technical plan for the V-band that does not reduce the amount of spectrum for satellite *or* terrestrial fixed wireless service,⁹ Boeing urges the Commission to designate only the 38.6-40.0 GHz band for terrestrial wireless services and keep the 37.6-38.6 GHz band open for satellite service, on the theory that “there is no significant wireless deployment or demonstrated demand for [terrestrial wireless] services” in that spectrum.¹⁰ Boeing’s proposal is both wrong on the facts (*see* Section II.B below) and misreading of the *FNPRM* – this proceeding is not about whether V-band spectrum

⁶ *Id.*

⁷ *Id.* at ¶ 10.

⁸ *Id.* at ¶ 11.

⁹ *Id.* at ¶ 12.

¹⁰ Comments of The Boeing Company, IB Docket No. 97-95, at 9 (filed Sept. 4, 2001) [the “Boeing Comments”]; *see also id.* at 13 (“[M]ajor [fixed wireless] operators in the 39 GHz band are either not providing significant service, are bankrupt, or are principally offering 39 GHz service only to urban office buildings.”). Boeing’s view is not unanimous – Intelsat, for example, supports the Commission’s proposal to redesignate the 37.6-38.6 GHz for terrestrial wireless service. *See* Comments of Intelsat Global Service Corporation, IB Docket No. 97-95, at 2 (filed Sept. 6, 2001) [the “Intelsat Comments”]; Comments of Spectrum Astro, Inc., IB Docket No. 97-95, at 2 (filed Sept. 4, 2001).

should be taken away from the fixed wireless industry and redesignated for satellite use, and nowhere in the *FNPRM* does the Commission even suggest that the public interest would be served by denying fixed wireless providers access to the 37.6-38.6 GHz band. Rather, WRC-2000, with the support of the U.S. and CITEL, has already determined that the 37.0-40.0 GHz band should be available for fixed wireless service – consistent with the broader objectives of the *FNPRM*, the Commission should maintain that position here.

Boeing and Hughes also recommend that the Commission depart from the U.S. position and permit ubiquitous earth station deployment in the 37.5-40.0 GHz band, subject only to whatever PFD limits are adopted in this proceeding.¹¹ Save for Boeing's bald assertion that "the Commission can achieve its objective of promoting wireless service in this band without additional restrictions on earth station function or usage,"¹² neither Boeing nor Hughes offer any meaningful technical support for this proposal that undermines the Commission's findings on this issue in the *FNPRM*.¹³ This, obviously, stands in stark contrast to the detailed technical findings supporting the U.S. position at CITEL on this issue, where the U.S. recommended that only gateway earth station

¹¹ Boeing Comments at 18-19; Comments of Hughes Communications, Inc., IB Docket No. 97-95, at 11-12 (filed Sept. 4, 2001) [the "Hughes Comments"]. Again, this view is not unanimous. *See* Comments of TRW Inc., IB Docket No. 97-95, at 26 (filed Sept. 4, 2001) ("TRW does not object to the limitation on the ubiquitous deployment of satellite earth stations [below 40 GHz], as it recognizes the need to sacrifice a measure of Part 101 flexibility in order to preserve the proposed designation of the 37.5-40.0 GHz band for use by wireless services.") [the "TRW Comments"].

¹² Boeing Comments at 19.

¹³ *See FNPRM* at ¶ 46 ("Prior to WRC-2000, wireless and satellite service proponents reached an agreement that among other things, established wireless services as the predominant use of the 37.5-40.0 GHz band. We believe that the potential ubiquitous deployment of satellite earth stations in the 37.5-40.0 GHz band threatens to defeat the WRC-2000 consensus that wireless services should constitute the predominant use of the band.").

facilities be permitted below 40 GHz, subject to stringent PFD limits and “careful site selection and engineering.”¹⁴

In a similar vein, the satellite interests are nearly uniform in requesting that the Commission reject the U.S./CITEL approach to establishing appropriate satellite PFD limits and instead adopt the high provisional, *verification* PFD limits approved at WRC-2000.¹⁵ The WRC-2000 decision is silent on *operational* PFD limits except in the case of Region 2, where the operational PFD limits align with the U.S./CITEL position. The distinction between operational and verification PFD limits is critical but largely ignored in the satellite industry’s comments on the *FNPRM*.¹⁶ Also, WRC-2000 in fact accepted the U.S./CITEL approach on a provisional basis for Region 2, for the simple reason that high density fixed wireless systems below 40 GHz are far more heavily deployed in the

¹⁴ *Id.* at ¶ 9. For this reason, it is absolutely essential that the Commission’s rules define the “gateway” concept in a manner that leaves satellite providers no room to argue that they are permitted to construct ubiquitous earth station facilities below 40 GHz, regardless of any Commission policies to the contrary. A suggested rule amendment to this effect is attached hereto as Appendix A.

¹⁵ See Resolution 84 (WRC-2000), “Power Flux-Density Limits In the Bands 37.5-42.5 GHz For The Fixed-Satellite Service, Broadcasting-Satellite Service and Mobile Satellite Service” at *resolves* 1: (“[T]he limits in Table S21-4 for the bands 37.5-40.0 GHz and 40.5-42.5 GHz, as revised by this conference, shall be applied for *verification* purposes by the Radiocommunication Bureau and by administrations as of 2 June 2000 in accordance with the provisions of Nos. S21.16.10 and S21.16.12.”) (emphasis added)

¹⁶ *FNPRM* at ¶ 37. TRW plays loose with the facts here, selectively quoting the U.S. Preliminary View for WRC-2003, Agenda Item 1.32B, to support its contention that the U.S. has totally abandoned the original U.S./CITEL PFD proposal and the Region 2 *operational* PFD limits and instead now supports an inaccurate reading of the WRC-2000 formulation. See TRW Comments at 22 n.49. TRW conveniently omits the following: “The U.S. supports a policy that allows FSS satellites operating at the nominal clear-sky levels (Table S21-4 minus 12 dB) under clear sky conditions in the bands 37.5-40.0 GHz bands *to increase PFD by up to 12 dB to compensate for fading conditions between the satellite and one or more geographically separated Earth stations.*” U.S. Preliminary View for WRC-2003, Agenda Item 1.32B (May 21, 2001), at http://www.fcc.gov/wrc-03/files/docs/prelimi_vies/usp_v_june11.pdf (emphasis added). This, of course, is the original U.S./CITEL position.

United States than in Europe.¹⁷ Furthermore, there is no substantial evidence in the record which suggests that the more conservative U.S./CITEL approach is unworkable, or that otherwise undermines the Commission's assertion that "adopting either the proposed U.S./CITEL power-control method or the WRC-2000 method should yield the same result."¹⁸

Equally important, the Commission has observed that it "[h]as never needed to address how to permit satellite space station licensees to respond to fade conditions in [the Commission's] rules."¹⁹ Given the Commission's admitted lack of experience with the issue, the views of the U.S. generally as to the need to provide fixed wireless service with a high level of interference protection from satellite operations,²⁰ and the absence of any real marketplace incentive for satellite providers to unilaterally reduce power for the benefit of fixed wireless providers with whom they will be competing for customers, it is both appropriate and necessary for the Commission to adopt the more conservative U.S./CITEL approach, and thereby give fixed wireless providers at least some assurance that they will be accorded adequate interference protection from satellite operations under the Commission's rules. It is also crucial to preserve the "soft segmentation" policy and avoid imposing inequitable technical burdens on fixed service operations below 40 GHz, which is precisely what the satellite industry is proposing here.

¹⁷ See Winstar Comments at 5; Intelsat Comments at 7.

¹⁸ *FNPRM* at ¶ 38.

¹⁹ *Id.* at ¶ 37.

²⁰ See U.S. Preliminary View, n. 16 *supra* ("The unique characteristics of some [high density fixed wireless] networks in the 37.5-40.0 GHz band, which include links across a very wide range of elevation angles, [make] them much more sensitive to satellite downlink interference than more traditional [fixed wireless] networks or [high density fixed wireless networks] with smaller concentrations of high elevation angle links.").

Finally, for much the same reason, the Commission should reject TRW's suggestion that the Commission not adopt any limits whatsoever on the time during which satellite operators may exceed the Commission's PFD limits to overcome fading conditions, and that the Commission instead permit satellite operators to unilaterally self-regulate when and for how long they may do so.²¹ If adopted, this proposal effectively would negate the gains achieved by the United States at WRC-2000, since it would render the Commission's PFD limits null and void at a satellite operator's discretion and for whatever length of time the satellite operator determines is necessary to optimize its own operations. As such, TRW's proposal effectively seeks to overturn the carefully crafted soft segmentation policy. Moreover, TRW's proposal is disturbingly vague: satellite systems would only be required (1) not to increase power "for longer than necessary" to overcome fading, and (2) to increase power "by only the amount needed to close the link (up to 12 dB)." TRW provides no details as to how the Commission could enforce these criteria in a meaningful way without taxing the Commission's limited resources and/or exposing fixed wireless providers to unacceptable levels of interference for extended periods of time.

The appropriate time limit for non-compliant satellite operations is a highly complex technical issue that, appropriately, is currently being studied under the auspices of the ITU.²² Until those studies are completed, WCA submits that the Commission

²¹ TRW Comments at 24-25.

²² The U.S. Preliminary View notes that "the U.S. is currently participating in ITU-R studies that will determine the appropriate percentage(s) of time during which satellite networks and systems will need to use downlink fade compensation, and any associated conditions that are appropriate to minimize the impact of such use on affected HDFS links."

should leave the time limit issue to private negotiations between satellite and all affected fixed wireless providers, and should in no case permit satellite operators to exceed the Commission's PFD limits for more than .001% of the time per year, so as to ensure that fixed wireless systems will be able to provide a service level of 99.999% availability to their customers.²³

B. The Commission's Regulatory Scheme for the V-Band Must Be Consistent With the Commission's Policies Promoting Fixed Wireless Service.

As a matter of policy, many of the satellite industry's arguments are disingenuous in the extreme. Without a hint of irony, Boeing's position essentially is that the Commission should respond to the recent financial difficulties of "millimeter wave" fixed wireless providers by giving them as little clear spectrum as possible for the indefinite future. Of course, it is very hard to reconcile this argument with, for example, the Commission's recent efforts to salvage the financially shipwrecked Mobile Satellite Service ("MSS") by proposing to permit MSS operators to utilize their spectrum for terrestrial wireless service.²⁴ Indeed, in expressing support for that proposal, Boeing

²³ See WCA Comments at 2 (discussing fixed wireless industry's need for 99.999% availability). Accordingly, on this issue the Commission should reject TRW's proposed amendments to Section 25.208 of the Commission's Rules. See TRW Comments at 37-38.

²⁴ See *Flexibility for Delivery of Communications by Mobile Satellite Service Providers in the 2 GHz Band, the L-Band, and the 1.6/2.4 GHz Band*, IB Docket No. 01-185, FCC 01-225 (rel. Aug. 17, 2001). It is also somewhat ironic that Boeing should ask the Commission to set aside the 37.6-38.6 GHz band for satellite use because fixed wireless operators are "bankrupt." See, e.g., Emmett, "The World According to Satellite," *Broadband Wireless*, at 1, 20 (June/July 2000) ("Iridium's failure has been nothing short of spectacular. The project involved a constellation of 66 satellites designed for mobile voice telephony, and circling some 485 miles above the earth – at a cost of \$5 to \$7 billion. A bankruptcy judge in New York gave Iridium permission to incinerate its satellites in the atmosphere when the company announced that it had not received suitable buyers."); "New ICO Tackles 3G," *Wireless Week* (May 22, 2000) at <http://www.wirelessweek.com/News/May00/five522.htm> (discussing bankruptcy of ICO Global Communications); Hessedahl, "Disaster of the Day: Globalstar," at <http://www.forbes.com/2001/01/17/0117disaster.html>.

asked the Commission to adopt the very same supportive regulatory approach for economically distressed satellite providers that it now seeks to deny to economically distressed fixed wireless providers.²⁵ Boeing presumably is also aware that the Commission has rejected the satellite industry's previous attempts in other proceedings to have fixed wireless spectrum reallocated for satellite use.²⁶ Finally, Boeing also must be aware that the fixed service operators who participated in the 39 GHz auction received their 10-year term licenses less than a year ago, and that those operators certainly deserve the opportunity to use them without the intrusion of harmful interference. Simply stated, the notion that the future of fixed wireless service in the United States should be sacrificed on the altar of the satellite industry has no currency at the Commission. Boeing's arguments to the contrary should be rejected.

Hughes' position is equally puzzling in view of its ardent opposition to Northpoint's proposed use of the 12.2-12.7 GHz band for terrestrial multichannel video and data or "MVDDS" services. Here, Hughes is arguing in favor of according satellite providers greatly expanded operational and interference protection rights vis-à-vis fixed wireless operators in the 37.5-40.0 GHz band who have spent billions on acquiring

²⁵ See Letter from Valerie K. Schuman, Vice President & Assistant General Counsel Space and Communications, The Boeing Company, to Chairman Michael K. Powell, IB Docket No. 99-81 (April 5, 2001) ("Suffice it to say, without reciting past events, investments [in MSS] have not always resulted in satisfactory financial returns for their owners and investors. *If private enterprise is to continue to provide the public with improved and affordable communication services that make efficient and effective use of the radio spectrum, it must have confidence that the hurdles to success are not insurmountable.*") (emphasis added). See also similar comments by Intelsat.

²⁶ See *Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Services*, 16 FCC Rcd 596, 624-5 (2001) (denying SIA's attempts to reallocate portions of the 2500-2690 MHz band for satellite use; *id.*, FCC 01-256 at ¶¶ 33-36 (rel. Sept. 24, 2001) (denying SIA's petition for reconsideration).

spectrum, purchasing equipment and deploying facilities to deliver competitive voice and data services to consumers. In the Northpoint matter, however, Hughes was far less cavalier when its own billion-dollar investment in DBS was at risk, going so far as to suggest that Northpoint should be denied *any* access to the 12.2-12.7 GHz band for its proposed MVDDS service.²⁷

Likewise, according satellite providers unilateral self-regulation or other unbounded rights in the 37.0-40.0 GHz band simply cannot be squared with the Commission's desire to designate that spectrum for fixed wireless services. The Commission's former Chief Technologist perhaps put it best: "[I]f the Nation is to enjoy the full, pro-competitive, deregulatory benefits envisioned by the passage of the Telecommunications Act of 1996, we need *wireless* systems as full-fledged competitors in the provision of local telecommunications services."²⁸ This is especially true in larger urban markets, where wireline incumbents remain by far the dominant providers of

²⁷ See Comments of DirecTV, Inc., ET Docket No. 98-206, at 4 (filed March 12, 2001) ("The 'new' proposed MVDDS service is nothing more than another proposed fixed wireless service offering video and broadband capabilities. There is no reason that it cannot be accommodated in other frequency bands, such as 2.5 GHz (MMDS), 24 GHz (DEMS) 28 GHz (LMDS), or 39 GHz."); *id.* at 26 ("Given the tremendous capital investment that DBS operators have made to bring an extraordinary level of service to consumers on a nationwide basis, the stakes are far too high for the Commission to permit widescale MVDDS system deployment until the implications for millions of DBS consumers are fully understood.").

²⁸ Hatfield, "Perspectives on the Next Generation of Communications," Keynote Address Before the Vehicular Technology Conference Fall 2000, at 3 (delivered Sept. 26, 2000) at http://www.fcc.gov/oet/speeches/perspec_next_generation.doc. See also Statement of Thomas Sugrue, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, before the Subcommittee on Telecommunications, Trade and Consumer Protection, United States House of Representatives re: Access to Buildings and Facilities by Telecommunications Providers (delivered May 13, 1999) ("Because their technology enables them to avoid the installation of new wireline networks, wireless service providers may be among those with the greatest potential quickly and efficiently to offer widespread competitive facilities-based services to end users.").

broadband service and remain free of significant competition from non-wireline technologies and competitive wireline carriers (*e.g.*, CLECs, cable overbuilders).²⁹

Contrary to what certain members of the satellite industry would have the Commission believe, millimeter wave providers have not folded their tent and declared defeat. For example, Winstar Communications, Inc. ("Winstar") services business customers in many urban areas, and is the most successful awardee in the nation for General Services Administration Metropolitan Area Acquisition (MAA) contracts, winning thirteen contracts since the program began.³⁰ Moreover, millimeter wave providers provide critical facilities-based primary and redundant communications infrastructure. In the wake of the tragic events of September 11 in New York City and Washington, D.C., Winstar, XO Communications and Teligent all deployed personnel to reconfigure their networks and establish communications lines for rescue workers and others.³¹ Winstar created voice and data network access to three emergency relief centers, the Department of Justice, the Federal Bureau of Investigation, Federal Courts, the Federal Emergency Management Agency and other facilities in lower Manhattan, and also installed communications services for the Pentagon, providing that facility with access to a nearby cellular network via Winstar's radio equipment.³² In Philadelphia,

²⁹ See, *e.g.* "Falling Through The Net: Toward Digital Inclusion," NTIA White Paper, <http://search.ntia.doc.gov/pdf/fttn00.pdf>, at 23 (October 2000).

³⁰ GSA MAA Award Press Releases: http://www.fts.gsa.gov/news_room/press_releases/press.htm.

³¹ See Smith, "Broadband Carriers Aid to Get Networks Working," *RCR Wireless News* (Sept. 24, 2001).

³² See McCall, "Companies Assist Restoration Efforts," *Wireless Week* (Sept. 24, 2001), at <http://www.wirelessweek.com>.

Winstar assisted the American Red Cross by doubling its phone line capacity in just a few hours, enabling it to handle over 500 calls an hour from those wanting to donate blood or provide other aid. Winstar is also using its WirelessFiber technology to support many users and other major interexchange carriers.

The examples cited above confirm recent media reports on the pressing need for physically diverse facilities-based networks as a means of ensuring network security in emergency situations and preserving the national communications infrastructure.³³ It therefore is imperative that the Commission preserve and protect fixed wireless service in *all* frequency bands to the fullest extent possible, so that physically diverse, facilities-based alternatives remain readily available to serve the public and its institutions.

Furthermore, the Commission cannot forget one overriding fact that is critical to the outcome of this proceeding: unlike those satellite providers who are attempting to appropriate the 37.0-40.0 MHz band for themselves, the millimeter wave providers who are already there have bought and paid for their spectrum at auction. The Commission's competitive bidding process is designed to "provide[] incentives for licensees of spectrum to compete vigorously with existing services, develop innovative technologies,

³³ See Guernsey, "An Unimaginable Emergency Put Communications to the Test," *The New York Times*, at <http://www.nytimes.com/2001/09/20/technology/circuits/20INFR.html> (Sept. 20, 2001) ("As planned, the telecommunications system also relied heavily on built-in redundancies. Many companies, for example, have more than one line from their offices to high-speed access points. But the disaster did expose some of those contingency plans. Some of those multiple lines travel the same conduits to the same routing centers. If something happens to those conduits or routing centers – as did in many cases on Tuesday – all the redundancy in the world doesn't help: all the cables would be damaged . . . Roy A. Maxion, director of the dependable-systems laboratory at Carnegie Mellon University in Pittsburgh, preached the value of physical diversity in networks. 'I wouldn't want to be alarmist about this,' he said, 'but what I think is interesting is how the system is not set up. A lot of these contingency plans are not in place.' He added that, 'as a nation we are dangerously vulnerable.'").

and provide improved products to realize expected earnings.”³⁴ Indeed, the governing statute, Section 309(j)(3) of the Communications Act, directs the Commission to auction spectrum in a manner which promotes “the development and rapid deployment of new technologies, products, and services for the benefit of the public”³⁵ Incentives to deploy competitive services disappear where the Commission raises even the possibility that rights acquired at auction may be diminished at a later time, since no license holder can be reasonably expected to make the enormous investments required for developing innovative, competitive services in the face of such risk. As a result, consumers ultimately pay the price of less competition or delayed competition.

Lastly, the Commission’s 39 GHz auction closed only last year,³⁶ and winning bidders just began receiving their licenses a few months ago. Having come this far in the 39 GHz licensing process, it would be truly anomalous for the Commission to now reverse field and adopt a new band plan and technical rules that effectively negates the rights that winning bidders bought and paid for at auction, all for the benefit of satellite providers who paid not one dime for their spectrum.³⁷ Certainly, had winning bidders known that those rights might be sacrificed to the satellite industry, they would have

³⁴ *FCC Report to Congress on Spectrum Auctions*, 13 FCC Rcd 9601, 9616 (1997).

³⁵ 47 U.S.C. § 309(j)(3)(A).

³⁶ “39 GHz Band Auction Closes,” FCC Public Notice, Report No. AUC-30-E (Auction No. 30), DA 00-1035 (May 10, 2000).

³⁷ *Cf. TRW Inc.*, 16 FCC Rcd 5198, 5202 (WTB, rel. Mar. 12, 2001) (“A 39 GHz band EA licensee has authorization to provide wireless terrestrial services within its EA(s) on its licensed channel(s). Upon grant of a 39 GHz band EA license, the licensee has exclusive operating rights on its licensed spectrum in its EA provided it protects incumbent operations. A 39 GHz band EA license authorizes the licensee to construct and operate terrestrial fixed stations in the specified EA. Although FSS earth station operations are consistent with the allocation for the 39 GHz band, such use has not been permitted to date because of the technical issues that must still be resolved.”).

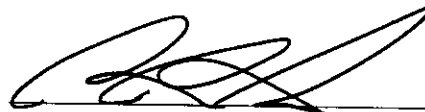
adjusted their bids to account for that risk. To change the rules in the middle of the game would not only represent a substantial breach of faith with those who participated in the 39 GHz auction – it would have a chilling effect on future investments based on auctioned licenses and on future auctions themselves, and could very well prompt requests for refunds. The satellite industry's complaints notwithstanding, there is no legitimate rationale for the Commission to court that result.

WHEREFORE, for the reasons set forth above, WCA requests that the Commission adopt the proposals in the *FNPRM* subject to the recommendations set forth herein and in WCA's initial comments filed September 4, 2001.

Respectfully submitted,

THE WIRELESS COMMUNICATIONS
ASSOCIATION INTERNATIONAL, INC.

By:


Paul J. Sinderbrand
Robert D. Primosch

WILKINSON BARKER KNAUER, LLP
2300 N Street, NW
Suite 700
Washington, DC 20037-1128
202.783.4141

Its Attorneys

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APPENDIX A

Section 25.202(a)(1) (47 C.F.R. § 25.202(a)(1)), note 14, should be amended to read as follows:

Use of this band by the fixed-satellite service is limited to “gateway” earth station operations, provided the licensee under this Part obtains a license under Part 101 of this Chapter or an agreement from a Part 101 licensee for the area in which an earth station is to be located. Satellite earth station facilities in this band may not be ubiquitously deployed, may not be used to serve individual customers, and may not otherwise be operated in a manner that causes harmful interference to licensed terrestrial wireless operations.